

PATENT COOPERATION TREATY

From the Japan Patent Office (INTERNATIONAL SEARCHING AUTHORITY)

PCT

To: Agent of Applicant

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WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY
(Implementing Regulation 40 bis)
(PCT Rule 43bis.1)

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|-------------------------------------|-----------|
| Date of mailing (day/month/year) | 31.8.2004 |
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| Applicant's or agent's file reference F559PCT |
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FOR FURTHER ACTION

See paragraph 2 below

| | | |
|-------------------------------|--------------------------------------------|--------------------------------|
| International application No. | International filing date (day/month/year) | Priority date (day/month/year) |
|-------------------------------|--------------------------------------------|--------------------------------|

PCT/JP2004/008116

10.06.2004

29.07.2003

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| International Patent Classification (IPC) Int. Cl ⁷ H03H 9/64 |
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| Applicant |
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Murata Manufacturing Co., Ltd.

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220

3. For further details, see notes to Form PCT/ISA/220

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| Date of completion of this opinion |
|------------------------------------|

17. 08. 2004

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|----------------------------------------|--------------------|----|------|
| Name and mailing address of the ISA/JP | Authorized officer | 5J | 8525 |
|----------------------------------------|--------------------|----|------|

Japan Patent Office

3-4-3, Kasumigaseki, Chiyoda-ku, Tokyo 100-8915, Japan

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**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/JP2004/008116

Box No. I Basis of this opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
☐ This opinion has been established on the basis of a translation from the original language into the following language _____, which is the language of a translation furnished for the purpose of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material
☐ a sequence listing
☐ table(s) related to the sequence listing
 - b. format of material
☐ in written format
☐ in computer readable form
 - c. time of filing/furnishing
☐ contained in the international application as filed.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/JP2004/008116

Box No. V **Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

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|-------------------------------|--------|-----|-----|
| Novelty (N) | Claims | 1-9 | YES |
| | Claims | | NO |
| Inventive step (IS) | Claims | | YES |
| | Claims | 1-9 | NO |
| Industrial applicability (IA) | Claims | 1-9 | YES |
| | Claims | | NO |

2. Citations and explanations:

Document 1: Japanese Unexamined Patent Application Publication No. 2000-151355 (Toyo Communication Equipment Co., Ltd.) May 30, 2000

Document 2: Japanese Unexamined Patent Application Publication No. 10-65481 (Toyo Communication Equipment Co., Ltd.) March 6, 1998

Document 3: US 2002/0067227 A1 (Natalya F. Naumenko) June 6, 2002

The inventions described in claims 1 to 5, 8, and 9 do not have inventive step on the basis of Document 1 and Document 2 cited in the International Search Report.

The Document 2 (paragraphs [0013] and [0014]) discloses that an interdigital electrode transducer is assigned with overlapping-length weight for increasing the impedance of the antiresonance frequency. Therefore, it is easy for a person skilled in the art to assign overlapping-length weight to the interdigital electrode transducer for achieving the same purpose in the invention disclosed in the Document 1 (paragraphs [0014] and [0015]).

The inventions described in claims 6 and 7 do not have inventive step on the basis of Document 1, Document 2, and Document 3 cited in the International Search Report.

The Document 3 (paragraph [0057] and FIGs. 20 to 22) discloses that Cu and Au are used as an electrode material in such a manner that the Cu- or Au-electrode has a film thickness which is equivalent to an Al-electrode. Therefore, it is easy for a person skilled in the art to use a Cu- or Au-electrode instead of an Al-electrode in such a manner that the Cu- or Au-electrode has a film thickness which is equivalent to the Al-electrode of $H/\lambda = 0.08$ (8%) disclosed in the Document 1 (paragraph [0014]).